

## ABSTRACT

The mechanism of STAT3, which is considered to play a crucial role in EMT, was elucidated using zebrafish embryos. Unexpectedly, a STAT3 target gene turned out to be zinc transporter LIV1. The present inventors studied the relationship between STAT3 and LIV1 in EMT, and further studied their relationship with zinc finger protein Snail, known for its association with EMT. The results showed that LIV1, whose expression is regulated by STAT3, activated Snail, thereby ultimately inducing EMT. LIV1 can be used as an EMT regulatory agent. Further, because EMT is involved in cancer progression, LIV1 antisense nucleotides and the like may be used as pharmaceuticals for treating cancer.